



CS-mini

PORTABLE INFRARED SECURITY SYSTEM WITH GSM COMMUNICATOR

User Guide

(Manufacturer: ELFI H-2000 Szentendre, Rezeda u. 8. Hungary)

Made in EU



Dear Customer,

Thank you for choosing our product.

Please read this User Guide carefully before attempting use

Operations Problems can be avoided with correct usage & handling.

CS-mini is a portable wireless security system consisting of an Infrared Transmitter and an Infrared Receiver with a GSM-Communicator Module.

Units are connected to each other through an invisible infrared beam of 70 metres as a maximum. On interrupting this infrared barrier GSM-Communicator sends message(s) and calls for previously programmed telephone number(s).

Parts of kit CS-mini:

- 1** Infrared (IR) Transmitter **(with label "Infra Transmitter")**
- 2** Infrared (IR) Receiver **(with label "Infra Receiver")**
- 3** Antenna for IR Receiver
- 4** Kit case
- 5** 6 pcs of „AA” batteries
- 6** Waterproof cases (Optional)
- 7** Cantilevers for fixing units

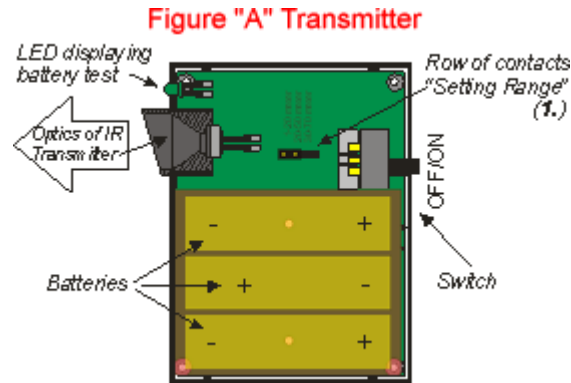
1. General instructions to be observed before use CS-mini

- 1.1 Both of the CS-mini units require 3 x 1.5 V (AA) alkaline batteries.
Always use high-quality alkaline batteries! Rechargeable batteries are not suitable!
- 1.2 Expected Battery life of new alkaline batteries
IR Transmitter – 1,500-4,000 hours
IR Receiver – 1,500-2,000 hours
with 20 metre distance between transmitter & receiver
Battery life is shortened when distance between transmitter & receiver is extended (70 Metre Max) or number of time system is triggered
Operating Temperature –10°C and +30°C
- 1.3 Always remove the batteries from CS-mini system when not in use for an extended period of time to avoid battery leakage & damage to system. Ensure that 3 green lights are flashing up as a minimum on both units during power up, otherwise please replace batteries immediately.
- 1.4 To insert new batteries, unlock the Battery Cover, this can be easily carried out by hand, please pay attention to battery polarity.
- 1.5 Please protect CS-mini units from rain when using in an outdoor environment (by covering or hiding them in an object etc.), otherwise it is recommended using the CS-mini with waterproof cases.
- 1.6 CS-mini units should always be mounted covertly in such a way that they can't be noticed by unauthorized persons to avoid theft. The CS-mini IR Receiver cannot be hidden in Full metal objects, as the GSM-connection is unable correctly to work due to lack of field intensity!
- 1.7 Units can also be fixed by using provided cantilevers.
- 1.8 IR Transmitter can be mounted using small magnets.
IR Receiver must not be mounted by using any magnets because they may disturb transmission of GSM-Communicator.
- 1.9 Moving sunlight then shade onto the optics of the IR Receiver may cause the system to false alarm, axial sun-rays directly getting on optics (e.g. sunrise) should be avoided.
- 1.10 Glossy surfaces within the infra line can cause object reflexion faults causing false alarms.
It can occur in indoor places as well, e.g. with glossy pieces of furniture or walls covered with tiles. This problem can be entirely eliminated through mounting CS-mini in places not affected by daily sunlight movements.
- 1.11 Operating Range can be set by switching micro tab contact into a different position (Setting Range) inside IR Transmitter CS-mini unit (Figure "A")
Distances are indicated as follows:

1st position: between 1-20 metres

2nd position: between 20-50 metres

3rd position: between 30-70 metres

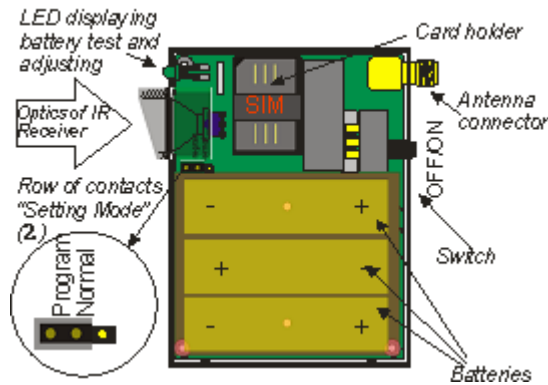


- 1.12 When using it outdoor, in extreme weather conditions (e.g. thick fog, dust or snow-storm) reliability of device may be reduced (e.g. false alarms may occur)
- 1.13 CS-mini can operate with any mobile phone service provider.
- 1.14 SIM Card PIN-code request feature should be turned off, otherwise the CS-mini system will not establish a connection with the service provider. This can be carried out by placing the SIM-card into any mobile phone and turning the feature to off.
- 1.15 If using a Pre-Paid SIM card, please ensure sufficient account credit before CS-mini deployment

2. Steps before use CS-mini:

- 2.1 Unlock Battery cover of units and insert 1.5 V (AA) batteries, paying attention to correct polarity.
- 2.2 Set required operation range "Setting Range" inside of IR Transmitter in required position of distance – see Figure A.
- 2.3 Insert a valid SIM-card with already cancelled PIN-code request into IR Receiver then screw on the antenna.

Figure "B" Receiver



- 2.5 Programming the CS-mini is carried out by Setting the device to “Program” mode by moving the micro tab contact called “Setting Mode” inside of the IR Receiver to the “Program” position – see Figure B. & then by sending an SMS command to the SIM number of the SIM-card inserted inside the CS-mini unit.

NOTE: Before sending any SMS commands please ensure that the IR Receiver is switched on and all LED display lights in red/green alternate (it can take 1-2 min.).

- 2.6 When Ready, place the device into the program mode & then send an SMS from your mobile phone to the SIM-card inserted into device with the following text:
start.en
(This SMS command will delete all the previous settings (if any) & programs the first “Monitor” mobile phone number.
- 2.7 After successful initial programming, you will receive a confirmation SMS (it can take up to 1-2 minutes).
- 2.8 After the initial programming, the CS-mini IR Receiver can be switched off and you can place the Micro tab contact back into the “Normal” position (see Figure B)
Now initial programming has been completed.
- 2.10 Please save the SIM phone number as “CS-mini” into your mobile phone
- 2.11 Whenever switching the CS-mini on, it will always send a “Status report” SMS, informing you on conditions of device (antenna signal, batteries’ charge etc.)

3. Mounting, Positioning, adjusting

- 3.1 To start using the CS-mini system, First place the IR Transmitter and IR Receiver facing each other, roughly at the same height, at a distance from each other of 70 metres as a maximum. Units should be hidden to avoid theft; it is recommended to hide them in an object or under the surface of a table etc., in a height from the ground of 50 cm as a minimum. Be sure that area in front of optics remains clear from other moving objects.

3.2 **IR Transmitter**

Switch on the IR Transmitter and check condition of batteries through flashing of GREEN LED next to optics; condition is indicated by number of flashes:

10 = Full Charge

1 = Almost Flat.

Red light = means that batteries should be changed immediately!

End of battery test is indicated by series of green/yellow lights alternating quickly.

(Battery test is carried out by device automatically.)

3.3 "Sight Aim" the IR Transmitter Lens in direction of the IR Receiver Lens.

3.4 **IR Receiver**

Go to the IR Receiver and "Sight Aim" IR Receiver roughly in its final position & then switch on

3.5 If batteries have insufficient charge, then a flashing red light will activate, otherwise you should see a solid RED light.

3.6 Adjust the IR Receiver by turning the optic lens in the direction of IR Transmitter, so they can communicate. When the lens alignment is correct & the devices are communicating correctly, then the colour of LED will change to solid GREEN.

3.7 The system will activate and be ready to use when a **continuous** infra-connection exists for longer than 15 seconds (continuous green light)

3.8 You can check if the system is triggering correctly by walking / crossing the invisible infra-ray line with the 15 second period and the LED light will turn RED

3.9 After System Activation the system will then check the GSM-connection (it takes about 1 minute); this process is indicated by flashing green lights.

After these flashes a continuous green light means that GSM-connection is built-up.

End of this process is indicated by green/yellow lights.

Within a few minutes you'll get an SMS informing you on exact field intensity at the place of the trap, conditions of batteries and normal operation of device.

3.10 Wait 1 minute and check operation by carrying out a test alarm (crossing the infra-ray path). You should receive a SMS with "Alarm"

3.11 The CS-mini LED lights will automatically turn off after a 5 minute period to avoid detection by other persons.

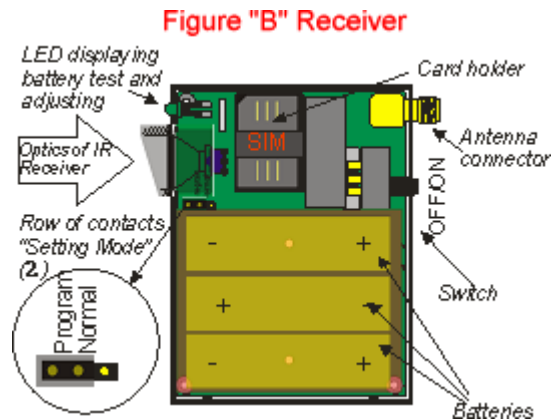
4. Special programming options of CS-mini

There are also further programming options for the CS Mini

Following information is designed for professional users!

General instructions on programming:

- Whenever programming, please set the micro tab inside the CS-mini IR Receiver in position “Program” (see Figure B).



- Each program SMS command should be started with words **CS-mini** – this is the default password
- Multiple commands can be sent at the same time
- Each command should be separated with a semicolon (;).
- While programming both small and capital letters can be used
- Insert a colon (:) at the end of a SMS command
- Please see lower for examples of SMS commands

Main programming commands:

- **ST:**
Replaces default “Alarm” text of SMS to be sent in case of alarm – max. 150 characters.
Default text is: „ALARM!”
- **AN:**
Addition of phone number to be **called** in case of alarm.
If you need more than one number put comma (,) between numbers.
Called number will hear a siren when answered
- **SN:**
Addition of phone number to be informed by SMS in case of alarm.

If you need more than one number put comma (,) between numbers.

- **CC:**
Programming status reports, sends system health report, cycle time is given in hours (from 0 to 9999). Default setting is 0.
- **CN:**
Programs System health reporting Mobile Phone number to be informed by SMS when reporting.
If you need more than one number put comma (,) between numbers.
- **RT**
This command deletes all SIM data.
Be aware that NO colon (:) is needed after this programming code!
- **GS:On**
Turns on "GSM-network Ready".
This feature keeps the CS-mini system in GSM active mode and can send SMS / Calls instantly when activated. This feature will use up more batteries
- **GS:Off**
Turns on "GSM Network Ready"
This turns on the GSM Standby mode and SMS / Calls will be delayed until system start up on alarm, but has a much longer battery duration.
- **PW:**
Entering NEW login password – max. 150 characters.
Default password is: „CS-mini“.
- **LA:**
Hu/En/De/Fr – setting information language.

You are advised to study following example before programming!

SMS Command Example:

CS-mini;ST:alarm in Main Street 8;AN: +61409123456,+61409654321;SN:+61409000000;CN:
+61409111111;CC:24;

Note: When programming numbers should be begin with "+country code". Our example refers to Australia with its mobile phone country code "+614".)

SMS Command Example Explanation:

When CS-mini is alarm activated, it logs into GSM-network and:

1. Sends an SMS to the programmed number: +61409000000 with text: "alarm in Main street 8"
2. Calls programmed numbers +61409123456, +61409654321.
Person(s) answering the call(s) will hear sounding a siren.
3. Every 24 hours it automatically sends status report (SMS) to the number+61409000000, informing on System Health Report

NOTE: Always return micro tab to "Normal" Setting once programming in completed

5. Programming Time Limit option (TL)

You can also program the CS-mini so it doesn't send any alarm SMS / Calls during a given period of time although it is switched on

Instructions

1. Device should be switched off and in "Normal" Mode
2. Send an SMS to SIM-card inserted into device as it is in the following example:
CS-mini;TL:07.30-22.50;
3. Wait 2 minutes then switch on CS-mini in the normal way.
4. Wait for SMS confirming switched on status.
In this SMS after text "**CS-mini in NORMAL operation**" there will appear message:
"Time Limit: 07.30-22.50"
meaning that the CS-mini won't send any alarm notices in case of between the period from 07.30 a.m. to 10.50 p.m.
This time limit blocking alarm signals will be repeated day-to-day until the CS-mini is switched OFF
These words will be followed by information on antenna signal and batteries' charge.

Important notes:

- This is the only command SMS that should can be sent in "Normal Mode" mode.
- System timer of CS-mini is synchronized to the time of sending SMS, which may cause an unpunctuality of \pm few minutes – it should be taken into account.

- Hours and minutes should be entered by 2 characters of each, e.g. “7.05” should be entered in form “07.05”.
- Upon switching off CS-mini previously programmed time limit will be automatically deleted, so if you would like to use time limit again, it should be programmed again in the above detailed way.

Should you have any question on handling or any technical problem with CS-mini, please, don't hesitate to contact your product Supplier or us directly:

ELFI-portable security